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Cicero devotes time to training solutions

by Steve Gunzburger, Human Effectiveness Directorate

MESA, Ariz. — Glenn Cicero, Threat Systems Engineer, is constantly engaged in delivering training solutions as a key member of the Air Force Research Laboratory's Human Effectiveness Directorate, Warfighter Training Research Division AFRL/HEA, Mesa Research Site, Ariz.

Industry experts understand Cicero's fervent desire to improve the quality of today's electronic warfare (EW) simulations, and he readily lends his expertise to numerous agencies. He champions a physics-based, synthetic electronic combat environment, which interacts with the natural environment and simulates real-world systems rather than extract information from a table lookup approximation. This ability allows the system to assume human decision-making for coordinated multi-threat actions, and allows interoperability with command and control (C2) functions.

Cicero has several ongoing research and development efforts. His "Next Generation Threat System" is an electronic combat environment that builds threat models on physics-based tactical operations models, hooks into C2 systems, and accounts for appropriate interactions with a natural environment model correlated with the simulation's terrain and visual/sensor model. The advanced sensor simulation is using aircraft code-based radar warning receivers, basic and advanced jamming models, and a physics-based common radar model. Human performance modeling gives decision-making capability to threat and C2 models for standalone functionality of the enhanced training system. The EW simulation environment under development is designed to support required Air Force training and expand the entire spectrum of EW and threat training to meet training needs of the future.

Cicero's extraordinary achievements highlight the special aspect of his crusade to spread the word—that the Air Force Research Laboratory can deliver quality EW training that will enable warfighters to maintain peak readiness for high-threat combat arenas. Accordingly, Cicero continues to lead his small EW team (Robert Feeman and Kyle Tygret of Lockheed Martin Technology Services Group) in breakthrough EW simulation work with laudatory praise from the warfighter. **@**